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ABSTRACT

A study was conducted to discover whether college students could predict which linguistic subunits of expository prose would be recalled. Comparison was made between the predicted subunits and the actual subunits recalled. Subjects were presented with 650 or 810 word prose passages and informed that they would be tested on their recall of passages at some time in the future. Half the subjects were tested immediately after reading the passages and half were tested after a seven-day interval. Two trained raters made judgements as to which linguistic subunits would be recalled. An independent group of 48 raters were given details of the experiment and asked to predict which phrase units they would recall had they been subjects in the experiment. The textual passages were ranked according to their predicted recalls and then divided into four groups ranging from highest to lowest predicted recall. The results showed that the predictions of which subunits would be recalled were generally accurate. It was suggested that raters could discriminate differences in meaningfulness among the units and could perceive differences in structural importance of linguistic subunits. References and tables are included. (AL)

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Raters' Predictions of the Recallability of Expository Prose as Related to Actual Recall[1]

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College students can predict accurately the relative rates of learning of individual verbal units within lists (Underwood & Schulz, 1960). Are college raters also able to predict the frequencies of recall of linguistic subunits in textual passages? What are the dimensional attributes of textual prose which are associated with raters' predictions?

In the present studies, various samples of learners attempted either an immediate or a delayed reproduction of a textual passage. An independent group of raters made predictions as to which of the linguistic subunits would be recalled most frequently. The actual recalls of the textual subunits were then compared with the predicted recalls.

Method. -- One textual passage contained 650 words on "The Role of Language in Learning." A sample of 52 raters objectively partitioned "Language" into 60 linguistic subunits bounded by acceptable pausal locations. The second textual passage, an 810-word unit called "Evolution of the Brain," was segmented into 80 subunits.

Additional college students read one of the textual passages twice and were told that "sometime in the future, you will be tested on the accuracy of your recall." The students were randomly assigned to immediate or 7-day reproduction groups. Immediate reproductions of "Language" were made by 61 learners; 46 learners made delayed reproductions. Sample sizes

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for "Evolution" were 58 at the immediate interval and 56 at the 7-day interval. At the time of recall, Ss were instructed to recall the passage as accurately as possible. Two trained raters made judgments as to which linguistic units were represented in each learner's reproduction.

An independent group of 48 raters was given details of the experiment and was asked to predict the phrase units which they would have remembered if they had been actual participants in the experiment. Raters indicated their judgments by marking out the linguistic subunits judged to be least likely to be remembered.

For each textual passage, the linguistic subunits were rank ordered according to their predicted recalls and then divided into four groupings of units. Each of the actual learners then received four recall scores based upon the number of subunits actually recalled from the subunits which were the highest one-fourth in predicted recall, the 2nd one-fourth, the 3rd one-fourth, and the lowest one-fourth.

Table 1 shows the relationship between the actual recall of the subunits and the predicted recall. Repeated-measures analyses of variance gave evidence that raters can predict the subunits which will be learned and remembered. For "Language," significant differences among the means were evident at both the immediate interval, F (3,180) = 111.45, and at the 7-day interval, F (3,135) = 34.12, $ps < .01$. Similarly, for "Evolution," the differences among means were statistically significant both at immediate recall, F (3,171) = 96.34 and at delayed recall, F (3,165) = 68.14, $ps < .01$.

TABLE 1

Mean Recall of Linguisitic Subunits as a Function of Levels of Predicted Recall

Textual Passage	Retention Interval	Levels of Predicted Recall: Lowest	3rd	2nd	Highest
"Language"	Immediate	2.57	3.69	6.52	7.43
	Delayed	.76	1.04	3.00	3.35
"Evolution"	Immediate	3.69	8.28	8.24	9.76
	Delayed	1.21	3.66	3.89	5.71

Stepwise multiple regression analyses, with predicted recall as the dependent variable, gave insight into some of the dimensions of prose which are associated with raters' judgments of predicted recall. The set of eight potential independent variables included three separate measures of meaningfulness, three measures of the perceived importance of the subunits, the serial order of the subunits, and the number of words in the subunits. For both "Language" and also "Evolution," the first two variables entered into the regression equations were measures of rated meaningfulness. After entry of the two meaningfulness variables, the multiple r for "Language" was .83: for "Evolution," the multiple r was .75. In each analysis, the third significant independent variable entering into the equation was a measure of the perceived structural importance of the subunits. Briefly, the regression analyses show that judgments of predicted recall are closely related to judgments of meaningfulness and also to judgments of structual importance.

Overall, the present studies provide evidence that college learners possess knowledge as to the textual subunits which are likely to be remembered. Perhaps this knowledge is gained through attempting to learn units which are similar in nature. Equally likely, however, is that raters can discriminate differences in meaningfulness among the units and then base their predicted recalls upon the differences. Similarly, perceived differences in structural importance may also help the raters to make judgments of predicted recall.

Reference

Underwood, B. J., & Schulz, R. W. Meaningfulness and verbal learning. Chicago: Lippincott, 1960.